

Appl. No. 10/732,935

Amdt. Dated November 1, 2005

Reply to Office Action of September 1, 2005

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to FIGs. 4 and 5. This sheet, which includes FIGs. 4 and 5, replaces the original sheet including FIGs. 4 and 5. Specifically, the changes to FIG. 4 include deletion of one of the reference characters "177" and "F", and the change to FIG. 5 includes deleting reference character "301".

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REMARKS

This is a full and timely response to the non-final Office action mailed September 1, 2005. Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Claims 1, 3-9, and 11-23 are pending in this application, with Claims 1, 9, and 17 being the independent claims. Claims 1, 5, 9, 13, 17, and 20 have been amended. Claims 2 and 10 have been canceled; accordingly, claims 3 and 4 have been amended to now depend from claim 1, and claims 11 and 12 have been amended to now depend from claim 9. No new matter is believed to have been added.

I. Objections to the Drawings

The drawings were objected to for allegedly failing to comply with 37 CFR 1.84 (p)(4) and (5). The Office Action alleges that the character "177" has been used to designate two different elements in FIG. 4 and "F" and "301", which appear in FIGs. 4 and 5, respectively, are not mentioned in the description.

The Applicants have submitted replacement sheets to correct these typographical errors. Specifically, one of the reference characters 177 and "F" have been deleted from FIG. 4 and "301" has been deleted. No new matter is believed to have been added.

Accordingly, the Applicants respectfully request withdrawal of these objections.

II. Claim Objections

Claim 5 has been objected to for allegedly referring to an elastomeric valve seat, when the material of the valve seat is not recited until claim 6. Applicants have deleted "elastomeric" from claim 5. Accordingly, the Applicants respectfully request withdrawal of this objection.

III. Rejections Under 35 U.S.C. § 102

Claims 9-14 and 17-21 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 4,986,310 (Bailey). This rejection is respectfully traversed.

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Independent claims 9 and 17 have been amended to now recite, *inter alia*, a valve body having a flow passage therebetween, the valve body and a valve seat, where the valve body comprises a backing plate and a cage, the backing plate including an annular flange extending therefrom, and the cage having at least a portion extending across the flow passage and an annular groove formed therein, and the valve seat coupled to the valve body and disposed between the backing plate and the cage, the valve seat extending at least partially into the flow passage and having an outer annular protrusion formed thereon, an opening therethrough, and an inner periphery, the outer annular protrusion disposed within the cage annular groove, and the inner periphery disposed under the plate annular flange.

Bailey relates to a valve assembly for allowing fluid flow in a first direction and preventing fluid flow in a second direction. See abstract. The valve assembly includes a housing for enclosing a regulator assembly comprising a hub portion which is positioned centrally within the housing and connecting members which extend radially toward a rim portion which is supported by the housing. The hub portion supports a disk-shaped substantially inflexible portion of the regulator assembly which extends over the connecting members to engage the rim portion and thereby prevent fluid flow in the second direction. However, nowhere does Bailey teach a valve body having a flow passage therebetween, the valve body comprising a backing plate and a cage, the backing plate including an annular flange extending therefrom, and the cage having at least a portion extending across the flow passage and an annular groove formed therein and a valve seat coupled to the valve body and disposed between the backing plate and the cage, the valve seat extending at least partially into the flow passage and having an outer annular protrusion formed thereon, an opening therethrough, and an inner periphery, the outer annular protrusion disposed within the cage annular groove, and the inner periphery disposed under the plate annular flange.

A claim can only be anticipated if each and every element recited in the claim is disclosed in a reference, either explicitly or impliedly. Accordingly, as Bailey fails to disclose, either explicitly or inherently, at least the above-noted elements of claims 9 and 17 and the Examiner has failed to provide such an explicit or inherent disclosure of these

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elements, it is respectfully submitted that the rejection of those claims and the claims that depend therefrom are improper and the Applicants request withdrawal of the § 102(b) rejection.

IV. Rejections Under 35 U.S.C. § 103

A. Bailey in view of Lane

Claims 1-6 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,986,310 (Bailey) as applied to claims 9-14 and 17-21 above, and further in view of U.S. Patent No. 6,681,579 (Lane). The Applicants respectfully traverse this rejection.

i. Lane is Disqualified as Prior Art under 35 USC 103(c)

First, Lane is disqualified as prior art under 35 U.S.C. 103(c) because the instant application and Lane were, at the time the invention in the instant application was made, owned by, or subject to an obligation of assignment to, the same person. Specifically, both were assigned to Honeywell, Inc.

ii. Bailey and Lane do not disclose the elements of claim 1

Even if Lane was prior art, neither Bailey nor Lane alone or in combination, disclose all of the elements of claim 1. Claim 1 relates to an air turbine starter and, similar to claims 9 and 17, recites, *inter alia*, a valve body having a flow passage therebetween, the valve body and a valve seat, where the valve body comprises a backing plate and a cage, the backing plate including an annular flange extending therefrom, and the cage having at least a portion extending across the flow passage and an annular groove formed therein, and the valve seat coupled to the valve body and disposed between the backing plate and the cage, the valve seat extending at least partially into the flow passage and having an outer annular protrusion formed thereon, an opening therethrough, and an inner periphery, the outer annular protrusion disposed within the cage annular groove, and the inner periphery disposed under the plate annular flange.

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As mentioned above, Bailey does not disclose or teach the above mentioned elements. Moreover, Lane does not make up for the deficiencies of Bailey. Lane teaches a starter that includes check valves, however nowhere does Lane disclose a valve body having a flow passage therebetween, the valve body comprising a backing plate and a cage, the backing plate including an annular flange extending therefrom, and the cage having at least a portion extending across the flow passage and an annular groove formed therein and a valve seat coupled to the valve body and disposed between the backing plate and the cage, the valve seat extending at least partially into the flow passage and having an outer annular protrusion formed thereon, an opening therethrough, and an inner periphery, the outer annular protrusion disposed within the cage annular groove, and the inner periphery disposed under the plate annular flange, as recited in Claim 1. Therefore, the Applicants respectfully request withdrawal of these rejections.

Claim 2 has been canceled and claims 3-6 depend from claim 1 and accordingly, rely on the arguments presented above.

B. Bailey in view of Lane further view of Foster

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bailey in view of Lane as applied to claim 1 above, and further in view of U.S. Patent No. 5,927,561 (Foster).

Claim 7 depends on claim 1 and therefore relies on the arguments presented above regarding Bailey and Lane. Moreover, Foster does not make up for the deficiencies of Bailey and Lane. Foster relates to a manually operated pump that includes a pump housing and a plunger. However, nowhere does Foster disclose a valve body having a flow passage therebetween, the valve body comprising a backing plate and a cage, the backing plate including an annular flange extending therefrom, and the cage having at least a portion extending across the flow passage and an annular groove formed therein and a valve seat coupled to the valve body and disposed between the backing plate and the cage, the valve seat extending at least partially into the flow passage and having an outer annular protrusion formed thereon, an opening therethrough, and an inner periphery, the outer annular protrusion disposed within the cage annular groove, and the inner

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periphery disposed under the plate annular flange, as recited in Claim 7. Therefore, the Applicants respectfully request withdrawal of these rejections.

C. Bailey in view of Lane further in view of Shesler

Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bailey in view of Lane as applied to claim 1 above, and further in view of U.S. Patent No. 2,833,093 (Shesler).

Claim 8 depends on Claim 1 and therefore relies on the arguments presented above regarding Bailey and Lane. Moreover, Shesler does not make up for the deficiencies of Bailey and Lane. Shesler relates to a refinisher for valve seats. However, nowhere does Shesler disclose a valve body having a flow passage therebetween, the valve body comprising a backing plate and a cage, the backing plate including an annular flange extending therefrom, and the cage having at least a portion extending across the flow passage and an annular groove formed therein and a valve seat coupled to the valve body and disposed between the backing plate and the cage, the valve seat extending at least partially into the flow passage and having an outer annular protrusion formed thereon, an opening therethrough, and an inner periphery, the outer annular protrusion disposed within the cage annular groove, and the inner periphery disposed under the plate annular flange, as recited in Claim 8. Therefore, the Applicants respectfully request withdrawal of these rejections.

D. Bailey in view of Shesler

Claims 15 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bailey as applied to claims 9 and 17 above, and further in view of Shesler.

Claim 15 depends on Claim 9 and claim 22 depends on claim 17. Therefore, each relies on the arguments presented above regarding Bailey. Moreover, Shesler does not make up for the deficiencies of Bailey. Shesler relates to a refinisher for valve seats. However, nowhere does Shesler disclose a valve body having a flow passage therebetween, the valve body comprising a backing plate and a cage, the backing plate including an annular flange extending therefrom, and the cage having at least a portion

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extending across the flow passage and an annular groove formed therein and a valve seat coupled to the valve body and disposed between the backing plate and the cage, the valve seat extending at least partially into the flow passage and having an outer annular protrusion formed thereon, an opening therethrough, and an inner periphery, the outer annular protrusion disposed within the cage annular groove, and the inner periphery disposed under the plate annular flange, as recited in Claims 15 and 22. Therefore, the Applicants respectfully request withdrawal of these rejections.

E. Bailey in view of Foster

Claims 16 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bailey as applied to claims 9 and 17 above, and further in view of Foster.

Claim 16 depends on Claim 9 and claim 23 depends on claim 17 and therefore relies on the arguments presented above regarding Bailey. Moreover, Foster does not make up for the deficiencies of Bailey. Foster relates to a manually operated pump that includes a pump housing and a plunger. However, nowhere does Foster disclose a valve body having a flow passage therebetween, the valve body comprising a backing plate and a cage, the backing plate including an annular flange extending therefrom, and the cage having at least a portion extending across the flow passage and an annular groove formed therein and a valve seat coupled to the valve body and disposed between the backing plate and the cage, the valve seat extending at least partially into the flow passage and having an outer annular protrusion formed thereon, an opening therethrough, and an inner periphery, the outer annular protrusion disposed within the cage annular groove, and the inner periphery disposed under the plate annular flange, as recited in Claims 16 and 23. Therefore, the Applicants respectfully request withdrawal of these rejections.

V. Conclusion

Based on the above, independent Claims 1, 9, and 17 are patentable over the citations of record. The dependent claims are also submitted to be patentable for the reasons given above with respect to the independent claims and because each recite

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features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicant submits that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

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Dated: 11/1/05

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